DRUGS AND OTHER METHODS OF TREATMENT*

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The treatment of headache like most things in medicine resolves itself into a problem of diagnosis. In a sense there can be no proper treatment for "headaches" without specific regard for the cause. There are nervous, irritable, highly strung persons whose way of life may be corrected by the imposition of an hour's rest in the afternoon or almost better still by lying down for 15 minutes before and after each meal. This rest period not only should be free of interruption by man, beast or telephones but the patient should know before hand that no intrusion is possible. The world is too much with us, and none of us is enough alone. Further, as duodenal ulcers can follow hard on the heels of emotional stress, so can headache, especially of the constant "steelband" or frontal "helmet" type. It must be the physician's task to try delicately to unravel the skein of circumstances and allow—if the Fates be kind—some gentler pattern to be woven.

At Bellevue Hospital some years ago an investigation was made on persons with skull defects to discover the influence of sleeping, waking, and the administration of drugs on the rise and fall of pressure within the skull. It was found there, first, that the act of falling asleep coincided with an increase of intracranial pressure; the act of waking coincided with a fall. Second, the administration of caffein by hypodermic produced a marked drop in intracranial pressure, a circumstance which explains the action of caffein in making sleep difficult. Third, it was found that the opium derivatives greatly increased intracranial pressure and that amyl nitrite increased this pressure more than any other drug—which makes the routine use of such a vasodilator in

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hypertension more hazardous than helpful. Fourth, that intravenous 25 per cent glucose solution by vein changed the osmotic dynamics of the body fluids, dehydrated the brain, and reduced intracranial pressure and the headache that came with and from it.

It would seem that about one-third of all migraine victims have other members of their family similarly afflicted. This corresponds to the inheritability of the allergic constitution. Not nearly enough attention is paid to the problem of allergic headache. Eyerman (*Jour. of Allergy,* vol. ii, No. 2, Jan. '31, p. 106) carefully studying 63 cases of chronic and frequent headache found that in 69 per cent the pain was greatly lessened or failed to appear when certain and specific foods were omitted from the diet and recurred when these foods were eaten deliberately. One of the officers of this Academy suffered most of his life from a not severe, dull headache which appeared daily about 10 A.M., and disappeared before lunch. Not till a prolonged visit to Europe and the substitution of rolls and coffee for his daily egg did he discover tardily the origin of his discomfort. In another place I have arranged what seems to my mind sound evidence for believing that the morbid process in migraine is a localized allergic œdema implicating painfully the meninges and especially their foldings and angled reflexions emanating probably from the brain tissue itself. However, the detail of these happenings would take us too far afield; enough here to speak of one of our Bellevue patients with recurring ophthalmoplegic migraine—the meningeal crevice of the sphenoidal fissure presumably dropsical—recovered from symptoms and maintained good health by an "elimination" diet and had immediate return of pain and local palsies on resumption of the offending protein. (Foster Kennedy, *N. Y. State Journal of Medicine,* November 1st, 1933.) Dr. Mary O'Sullivan working at Bellevue Hospital has found ergotamine tartrate a 90 per cent specific for the migrainous seizure—the cure being often dramatic and ending the attack whether it be ordinarily a 5-day or 1-day episode. This is not achieved by anaesthetizing qualities, for one of our men with severe toothache at

the time of his migraine lost under gynergen (trade name) the latter but not the former, and another of our patients with a gun-shot wound of the brachial plexus causing constant ulnar pain who also suffered from migraine was relieved in his occasional migraine and to his disgust always retained his more embarrassing causalgia. The headaches of constipation are a commonplace to every physician and to multitudinous laymen. The morbid process causing the head pain to come from intestinal stases is less clear—it may well have an allergic basis and we remember that Soma Weiss and Pickering have uniformly produced violent headache by histamine injections.

Sinus headache is commoner in America than Europe; its diagnostic features would take too long to give here—the referred focal occipital pain from a diseased sphenoid should be remembered. I can't help wondering if the English habit of wide open bedroom windows transferred to centrally heated American houses is not responsible for the great incidence of sinus trouble here; our bedrooms are often in winter 30 degrees colder than our day rooms—and our masters, the shirt makers, cut pyjama necks so low that the jugulars and carotids are hard put to it to avoid being pipe-frozen: there would be more sense in leaving off pyjamas and wearing a muffler instead! However, if we should so cater to nudity and the French fear of courant d'air at one and the same time our Anglo-Saxon mores would indeed be in jeopardy! "Eyestrain," I suspect is blamed for more headache than it causes; but Ames of Dartmouth by his iconometer has been helpful in giving information in these matters.

The treatment of headache, as I said at the start, is that of causes: Rheumatic headaches with Heberden-like nodes under the scalp are commoner than is supposed and yield readily to salicylates. I think the most frequent cause of pain in the back of the neck and lower occiput is septic teeth and tonsils. Local skull pain persists sometimes after head injury from the formation of cerebro-meningeal adhesions, and these occasionally are broken up by the technique of

spinal air or oxygen insufflation. I mentioned the referred pain produced by periapical abscessed teeth, but should remind myself also of the grave violent headache often caused by pulpitis—a pain in its severity apparently equal to that of trigeminal neuralgia. Nocturnal syphilitic headache is less common now because of Ehrlich's beneficence, but severe headaches often come from inadequate sleep and undue fatigue. The headaches of the menses and uterine malpositions have only to be referred to. Hypertensive headache may be relieved soon by splanchnic operation—this would seem the right path but we must go down it further for clear knowledge. Head pain due to low barometric pressures is hopeless except for rest, cold baths and aspirin. A word on drugs: acetanilide is a poison and bromoseltzer a menace. Aspirin, phenacetin and caffein citrate are harmless to nearly everyone in ordinary dosage (5 grains of each for one dose—seldom used). Pyramidon can cause agranulocytosis and should be used cautiously. Luminal helps the nervously strained; a simple alkaline effervescent is a good habit—exercise is a better—and perhaps a tranquil mind is the best of all.